

New *Acerentulus* species from France (*Protura*, *Acerentomidae*)

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Abstract. *Acerentulus correzeanus* sp. nov. and *A. proximus* sp. nov. (from France, Corrèze, Bellechassagne) of "*cunhai*" group, and *A. gigas* sp. nov. (from France, Corrèze, Brigouleix, community of Sornac) of "*confinis*" group are described.

Key words: *Protura*, *Acerentulus*, taxonomy, France.

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The paper contains the descriptions of three new *Acerentulus* species collected in Corrèze, France.

The type material is deposited in the collection of the Institute of the Systematics and Evolution of Animals of the Polish Academy of Sciences, Kraków, Poland, some paratypes are in the Museum National d'Histoire Naturelle, Paris.

The terminology of BERNARD (1990) is used in the description of the shape of accessory setae.

Acerentulus correzeanus sp. nov.

(Figs 1-23)

D i a g n o s i s. Foretarsal sensillum *a* short, *b* much shorter than *c*, passing level of 2. Seta *P1a* absent on urotergite I, present on II-VII. Seta *P3a* on urotergite VI and VII absent. Urosternite I - III without pores, IV-V with 1+1, and VI with n+n pores. Acrostyli distinct, conical; penis with 5+5 setae.

D e s c r i p t i o n. Head setae of medium length, rostrum short (Fig. 1); additional seta absent, postpseudocular seta present. Sensory setae as short, linear microchaetae; 3+3 sensory setae on dorsal side, on ventral side (Fig. 2) not differentiated. Pseudoculus (Fig. 4) almost round with short lever, PR 12.2-19.0. Filamento di sostegno (Figs 5, 6) long, with round or slightly elongated calyx, and bilobate (rarely trilobed) posterior dilation, CF 3.7 - 4.7 (in maturi juniores and larvae II 3.9-5.3). Sensilla of maxillary palp (Fig. 1) thin, subequal. Tuft of labial palp with 3 branches, sensillum slender (Fig. 3).

Main setae on nota (Fig. 7) relatively long, *P1a*, *P2a*, and *P5* as small, gemmate microchaetae. Length ratio of *P1* : *P2* on mesonotum as 1 : 1.1-1.3. Seta *P4a* on metanotum, *A2* on thoracal sterna, *M2* on prosternum as linear microchaetae. Thoracal sterna without pores.

Foretarsus (Figs 8, 9) with short sensillum *a*, slightly passing level of *t2*; *b* short, passing level of $\gamma 2$; *c* long; *d* long, reaching level of *f*. All sensilla of external side thin, parallel-sided. Proximal pore near to base of *c*. Sensillum *t1* with slender, fusiform head; *t2* short, relatively thick; *t3* "leaf-like", of medium length. Sensillum *a'* situated distally to *t1*, long, slender, almost parallel-sided; *b'* and *c'* thin. Seta $\delta 4$ situated proximally to *c'*, longer than $\beta 1$. Length formula of foretarsal sensilla: $t3 < t1 < b < g = t2 < a' = b' = c' < a = c = d = e < f$. BS 0.26-0.32, TR 3.4-3.8, EU 0.1-0.2.

Body chaetotaxy of general *Acerentulus*-type. Urotergite I without seta *P1a*; *P2a* of same shape as *P1a* on nota; *A5* as short, thin linear microchaeta. Urotergite II-VI with seta *P1a* present, and without *P3a*; accessory seta *P1a* thin (Fig. 10) (with exception of urotergite VI – Fig. 11), *P2a* and *P4a* as relatively thick linear microchaetae. Urotergite VII with 4+4 anterior setae (*A1*, *A2*, *A4*, *A5*); seta *P1a* present, *P3a* absent. All accessory setae thin, almost hair-like (Fig. 12). Seta *P4a* (Fig. 14) as the other ones, situated near *P4* (on dorsal part of tergite). Pore *al* dorsally to *A5* on urotergite II – IV, on V to VII ventrally to it. Anterior lines on urotergite VII connected (Fig. 13).

Abdominal legs of normal *Acerentulus*-type. Accessory setae on urosternite I-VI thin (Fig. 15) (as *P1a* on tergites II-V), on VII (Fig. 16) hair-like (as on tergite). Urosternite VII without seta *Pc*. Connecting line on urosternite IV-VI absent. Porotaxy formula of urosternite I-VII / 0 / 0 / 0 / 1+1 / 1+1 / n+n¹ / 1 /. Pore on urosternite VII (Fig. 16) situated near its hind margin.

Urotergite and urosternite VIII with some very small granules, sometime forming more or less regular row. Comb VIII with straight hind margin, composed of 6 to 11 (mostly 8-10) slender teeth.

Seta *1a* on urotergite IX subequal to seta *1*, on XI shorter than it. Urotergite XI with 3+3 setae, seta *1* long. Hind margin setae of urotergite XII relatively long, equal. Dorsal pore single (Fig. 17). Urosternite XI (Fig. 18) with 3+3 setae, external ones much thicker than internal.

Squama genitalis ♀ with short distal prolongation of stylus and short, thick, stump, strongly sclerotised acrostylus (Figs 19-22). Penis (Fig. 23) with 5+5 setae – lateral seta of acroperiphallus absent.

Maturus junior with seta *P1a* on urotergites II – VII and on urosternite I present; seta *1a* on urosternite VIII absent. Larva II without larval seta on urosternite XII.

Body dimensions (in μm)

	imago	preim	mat.jun	larva II
head	117-142	106-115	102-123	92-107
pseudoculus	7-9	6-8	6-8	ca 6
filamento di sostegno	25-32	24-29	21-28	19-24
mesonotal <i>P1</i>	33-40	28-31	22-31	19-23
mesonotal <i>P2</i>	40-45	32-33	27-35	25-26
foretarsus	96-105	81-88	73-87	63-68
claw	27-30	22-24	20-25	19-20
empodial appendage	3-5	2-3	2-3	2-3
maximum body length	1340	1140	1120	940
No of specimens studied	40	8	21	5

Chaetal variability. Imago (40 specimens): urotergite VI – asymmetrical lack of *A2* (1 specimen); urotergite VII – asymmetrical lack of *A1* and *A2* (1 specimen); urotergite VIII – presence

¹In females 2+2, rarely 1+3 or 1+2, in males 2+3 rarely 2+2, in maturi juniores mostly 1+2.

of additional seta *Mc* (three setae *M* present!) (8 specimens), presence of two additional *M* setae (1 s-n)²; urosternite VIII – asymmetrical (2 specimens) and symmetrical (1 specimen) lack of seta *Ia*.

Preimago (8 specimens): urotergite VII – asymmetrical lack of *A2* (1 specimen); urotergite VIII – presence of additional *Mc* seta (1 specimen); urosternite VIII – asymmetrical lack of seta *Ia*; abdominal leg II – asymmetrical presence of 4 setae (1 specimen).

Maturus junior (21 specimens): urotergite II – asymmetrical (5 specimens) and symmetrical (5 specimens) lack of *P1a*; urotergite III – asymmetrical (3 specimens) and symmetrical (3 specimens) lack of *P1a*; urotergite IV – asymmetrical lack of *P1a* (2 specimens); urotergite V – asymmetrical lack of *P1a* (1 specimen); urotergite VII – asymmetrical presence of seta *A2* (1 specimen); urosternite IV – presence of asymmetrical additional seta near *P1* (1 specimen); urosternite VIII – asymmetrical presence of seta *Ia* (2 specimens).

Larva II (5 specimens) – chaetal variability not observed.

M a t e r i a l. Holotype: ♀ (5160), France, 17. 10. 1993. Corrèze, Brigueleix, community of Sornac, *Ilex aquifolium*, spruce, fir, douglas pine, birches; sample with moss. Leg. W. M. WEINER.

P a r a t y p e s: as holotype, 1 ♀ (5121), 1 ♂ (5117), 1 pm (5126), 1 mj (5165) and same locality, 7. 10. 1994. Leg. J. BAUDINOT and J. NAJT, 18 ♀ (5179 - 5196), 19 ♂ (5197 - 5215)

O t h e r m a t e r i a l: as holotype, 1 pm, 1 mj; same locality, 7. 10. 1994. Leg. J. BAUDINOT and J. NAJT, 7 pm, 20 mj, 5 l2.

D e r i v a t i o n o m i n i s: named after the geographic region.

D i s c u s s i o n – see next species.

Acerentulus proximus sp. nov.

(Figs 24-30)

D i a g n o s i s. Foretarsal sensillum *a* short, *b* much shorter than *c*, not passing level of $\gamma 2$. Seta *P1a* absent on urotergite I, present on II-VII. Seta *P3a* on urotergite VI absent, on VII present. Urosternite I-III without pores, IV-V with 1+1, and VI with n+n pores. Acrostyli indistinct, elongated; penis with 6+6 setae.

D e s c r i p t i o n. Head setae of medium length, rostrum short. Additional seta absent, postpseudocular seta present. Sensory setae as short, linear microchaetae, 3+3 on dorsal side, on ventral side not differentiated. Pseudoculus round, with short lever, PR 13-16. Filamento di sostegno long, with round calyx, and distinct, bilobate (rarely trilobed) posterior dilation, CF 3.5-4.3. Sensilla of maxillary palp thin, lateral shorter than ventral one. Tuft of labial palp with 3 branches, sensillum slender.

Main setae on nota relatively long, *P1a*, *P2a*, and *P5* as small, gemmate microchaetae. Length ratio of *P1* : *P2* on mesonotum as 1 : 1.2. Seta *P4a* on metanotum, *A2* on thoracal sterna, *M2* on prosternum as linear microchaetae. Thoracal sterna without pores.

Foretarsus (Figs 24, 25) with short sensillum *a*, reaching level of *t2*; *b* very short, not passing level of $\gamma 2$; *c* long; *d* long, reaching level of *f*. All sensilla of external side thin, parallel-sided. Proximal pore near base of *c*. Sensillum *t1* with slender, fusiform head; *t2* short, relatively thick; *t3* leaf-like, of medium length. Sensillum *a'* situated distally to level of *t1*, long, slender, parallel-sided; *b'* and *c'* thin. Seta $\delta 4$ situated proximally to *c'*, longer than $\beta 1$. Length formula of foretarsal sensilla: $t3 < t1 < b < g = t2 = a' = b' = c' < a = c = e < d = f$. BS about 0.3, TR 3.3-3.7, EU 0.1-0.2.

²The presence of additional *M* setae is more common in males (additional seta *Mc* exists in 7 males between 20 studied, two additional *M* setae were found in male) than in females (it was found in single specimen between 20 studied)

Body chaetotaxy of general *Acerentulus*-type. Urotergite I without *P1a*; *P2a* of same shape as *P1a* on nota; *A5* as linear microchaeta. Urotergite II - VI with seta *P1a* present, and without *P3a*. Accessory seta *P1a* thin, hair-like, *P2a* as linear microchaeta, thick (on urotergite VI *P1a* subequal to *P2a*). Urotergite VII with 4+4 anterior setae (*A1*, *A2*, *A4*, *A5*); setae *P1a* and *P3a* present. All accessory setae thin, hair-like. Seta *P4a* as the other ones, situated near *P4* on dorsal part of tergite. Pore *al* dorsally to *A5* on urotergite II - IV, on V to VII ventrally to it. Anterior lines on urotergite VII connected.

Abdominal legs of normal *Acerentulus*-type. Accessory setae on urosternite I-VI as linear microchaetae, thinner than that on tergites, on VII thin, hair-like, as on tergite. Urosternite VII without seta *Pc*. Connecting line on urosternite IV-VI absent. Porotaxy formula of urosternite I-VII / 0 / 0 / 0 / 1 + 1 / 1 + 1 / n + n / 1 / 1. Pore on urosternite VII situated near its hind margin.

Urotergite VIII with regular row of very fine (hardly visible) granules, urosternite VIII with row of granules larger than those on tergite. Comb VIII with straight hind margin, composed of 7-10 (mostly 8) slender teeth.

Seta *Ia* on urotergite IX as seta *I*, on X shorter than it. Urotergite XI with 3 + 3 setae, seta *I* short. Hind margin setae of urotergite XII relatively short, equal. Dorsal pore single (Fig. 26). Urosternite XI with 3 + 3 setae, external ones distinctly thicker than internal.

Squama genitalis ♀ with long distal prolongation of stylus and short, slightly sclerotised acrostylus (Figs 27-29). Penis with 6 + 6 setae – acroperiphallus with 2+2 setae (Fig. 30).

Maturus junior (single specimen) with seta *P1a* on urotergites II-VII and on urosternite I present; seta *Ia* on urosternite VIII present. Larval instars unknown.

Body dimensions (in µm) (in brackets – single specimen of maturus junior): head 120-131, pseudoculus 8-9 (8), filamento di sostegno 30-37 (27), mesonotal *P1* 34-36, mesonotal *P2* 41-44 (30), foretarsus 96-103 (81), claw 28-31, empodial appendage 4-5, maximum body length 1200 (1050).

Chaetal variability (9 imagines and 1 maturus junior) – not observed.

M a t e r i a l. H o l o t y p e: ♀ (5220): France, 24. 09. 1993. Corrèze, Bellechassagne, ca 780 m asl, forest with beech, oaks, birch, pine, sample with litter and soil. Leg. J. BOUDINOT, W. M. WEINER.

P a r a t y p e s: as holotype: 6 ♀ (5216 - 19, 5221, 5224), 2 ♂ (5222., 5223)

O t h e r m a t e r i a l: as holotype, 1 mj.

D e r i v a t i o n o m i n i s: *proximus* – the nearest (to *correzeanus* sp. n.)

D i s c u s s i o n. *Acerentulus correzeanus* and *A. proximus* belong to a group of species with short foretarsal sensilla *a* and *b* which NOSEK (1973) distinguished as the "*cunhai*" group.

The two new species are very similar to each other. They differ in the absence (in *A. correzeanus*) or presence (in *A. proximus*) of seta *P3a* on urotergite VII, in the length of the foretarsal sensillum *b* (in *A. correzeanus* it distinctly passes the level of γ₂, in *A. proximus* the sensillum does not pass it), and in the structure of external genitalia. The acrostylus of females is in *A. correzeanus* short, strongly sclerotised, almost conical; in *A. proximus* it is always hardly visible (slightly sclerotised?) and seems to be more elongated. In males of *A. correzeanus* there is only one seta on the acroperiphallus (the penis bears 5+5 setae), while in *A. proximus* there are two setae (the penis bears 6+6 setae as in most of the *Acerentulus* species).

In the lack of seta *P1a* on urotergite I and its presence on II-VI both new species are very similar to *A. tuxeni* RUSEK, 1966 (the abdominal chaetotaxy of *A. correzeanus* is identical so that in *A. tuxeni*). In *A. tuxeni* the foretarsal sensillum *c* is short, almost as long as *b*, and urosternite VI bears two single pores (RUSEK 1966; NOSEK 1973; SZEPTYCKI 1991). In both new species sensillum *c* is distinctly longer than *b*, and on urosternite VI there are two groups of 2 or 3 pores.

In the pattern of foretarsal sensilla both new species belong – together with *A. seabrai* DA CUNHA, 1952, *A. tolosanus* NOSEK, 1969, *A. ladeiroi* DA CUNHA, 1950, and *A. gerezianus* DA CUNHA 1952 – to the species with foretarsal sensillum *c* about twice as long as *b*.

All the mentioned species differ in the abdominal chaetotaxy – in *A. seabrai* seta *P1a* on urotergites I–VI is lacking, in three other species it is present, but in contradistinction to both new species it is also present on urotergite I (TUXEN 1964; 1982; NOSEK, 1969; 1973; ALDABA 1984). Additionally, in *A. tolosanus* seta *P3a* on urotergite VI is present.

A. seabrai and *A. ladeiroi* are characteristic in the peculiar (distal) position of foretarsal seta $\delta 4$ – in both the new species it is in the "normal" (proximal) position. In *A. ladeiroi* and *A. gerezianus* seta *P1a* on urotergites II–VI is situated posteriorly to *P1* (Tuxen 1982) – not laterally to it as in the both new species. Additionally (according to the author's own, unpublished, observation), in *A. gerezianus* on urosternite IV–VI there is only one, asymmetrically situated, pore and the connecting line is present. In both new species there is 1+1 pore on urosternites IV–V and n+n on VI, and the connecting line is absent.

Acerentulus gigas sp. nov.

(Figs 31–47)

D i a g n o s i s. Large species with long foretarsal sensillum *a* and seta $\delta 4$ in distal position. Seta *P1a* absent on urotergites I–VI, present on VII. Seta *P3a* present on urotergites VI and VII. Seta *P4a* on urotergite VII situated on membrana between tergite and laterotergite. Urosternite I–III without pore, IV–VI with 1+1 pores.

D e s c r i p t i o n. Head setae of medium length, rostrum long (Fig. 31). Additional seta absent, postpseudocular seta present. Sensory setae thin, 3+3 on dorsal side, on ventral side not differentiated. Pseudoculus (Figs 33,34) round, with short lever, PR 12–14 (in maturi juniores 14–15). Filamento di sostegno (Fig. 35) long, with large calyx and distinct, bilobate posterior dilation, CF 4.3–4.4 (in maturi juniores about 5). Sensilla of maxillary palp (Fig. 31) thin, lateral longer than dorsal one. Tuft of labial palp with four branches, sensillum slender (Fig. 32).

Main setae on nota (Fig. 36) relatively short, *P1a*, *P2a*, and *P5* as small gemmate microchaetae. Length ratio of *P1* : *P2* on mesonotum as 1 : 1.3–1.4 (in maturi juniores and larva II as 1 : 1.2–1.3). Seta *P4a* on metanotum, *A2* on thoracal sterna, *M2* on prosternum as linear microchaeta. Thoracal sterna without pores.

Foretarsus (Figs 37,38) with long sensillum *a*, reaching nearly level of $\gamma 3$; *b* of medium length, reaching level of $\gamma 3$; *c* shorter than *b*; *d* short, reaching base of *e*. Sensillum *a* thicker than others, all sensilla of external side thin, parallel-sided. Proximal pore proximally to *c*. Sensillum *t1* (Figs 38,40) with long, sometime nearly cylindrical head; *t2* long and thin; *t3* leaf-like, long. Sensillum *a'* situated distally to level of *t1*, long, nearly parallel – sided; *b'* and *c'* long and thin. Seta $\delta 4$ situated nearly on level of *c'* (sometime distally to it – Figs 38,39), subequal to $\beta 1$. Length formula of foretarsal sensilla: $t3 < t1 < g < a' < c < b = b' f = c' < d = e = t2 < a$. BS about 0.4, TR 3.9–4.2, EU 0.2.

Body chaetotaxy of general *Acerentulus*-type. Urotergite I without *P1a*; *P2a* of same shape as *P1a* on nota; *A5* as linear microchaeta. Urotergite II–V without setae *P1a* and *P3a*; VI without *P1a* and with *P3a* present (Fig. 41); accessory setae as linear microchaetae. Urotergite VII with 4 + 4 anterior setae (*A1*, *A2*, *A4*, *A5*); setae *P1a*, *P2a*, and *P3a* present; all accessory setae thin, nearly hair-like. Seta *P4a* as other ones, situated on small, isolated sclerite on membrana between dorsal part of tergite and laterotergite (Fig. 42). Pore *al* dorsally to *A5* on urotergite II–IV, ventrally to it on V–VII. Anterior lines on urotergite VII not connected, more or less parallel.

Abdominal legs of normal *Acerentulus*-type. Accessory setae on urosternite I–VI as linear microchaetae, mostly shorter than that on tergites, on VII as that on tergite. Urosternite VII without

seta *Pc*. Connecting line on urosternite IV-VI absent. Porotaxy formula of urosternite I-VII /0 /0 /0 /1 + 1/ 1 + 1/ 1 + 1/ 1 /. Pore on urosternite VII situated near its hind margin (Figs 43, 44).

Urotergite and urosternite VIII with some very small granules, sometime forming indistinct row. Comb VIII with straight hind margin, composed of 8-11 thin, more or less regular teeth.

Seta *1a* on urotergite IX equal to seta *1*, on X shorter than it. Urotergite XI with 3+3 setae, seta *1* long. Hind margin setae of urotergite XII long, external setae thicker than medial one. Dorsal pore single (Fig. 45). Urosternite XI with 6 + 6 setae, external setae very thick (Fig. 46).

Squama genitalis ♀ (Fig. 47) with long distal prolongation of stylus and very small acrostylus. Penis with 6 + 6 setae - acroperiphallus with 2+2 setae.

Maturus junior without seta *P3a* on urotergite VI, setae *P1a* on urosternite I and *1a* on VIII present. In single specimen of larva II urosternite XII with larval seta present.

Body dimensions (in µm)

	imago	mat.jun	larva II
head	156-179	139-146	116
pseudoculus	12-13	about 10	8
filamento di sostegno	36-42	about 30	?
mesonotal <i>P1</i>	36-40	33-34	25
mesonotal <i>P2</i>	48-54	41-42	33
foretarsus	122-137	101-105	83
claw	31-33	?	?
empodial appendage	about 6	?	?
maximum body length	1770	1330	990
No of specimens studied	6	2	1

Chaetal variability. Imago (6 specimens) – in one specimen additional, asymmetrical seta near A2 on urosternite VI.

Maturus junior (2 specimens) – in one specimen seta A2 on mesosternum is asymmetrically lacking, and A4 on urotergite VI is asymmetrically present.

M a t e r i a l. H o l o t y p e: ♀ (5157), France, 17. 09. 1993. Corrèze, Brigouleix, community of Sornac, *Ilex aquifolium*, spruce, fir, douglas pine, birches; sample with moss. Leg. W. M. WEINER.

P a r a t y p e s: 24. 09. 1993. Corrèze, Bellechassagne, ca 780 m asl, above the peat bog, thin forest with birch, pine, oaks, *Ilex aquifolium*, sample with moss. Leg. J. BOUDINOT and W. M. WEINER. 3 ♀ (5153, 54, 55).

24. 09. 1993. Corrèze, Bellechassagne, ca 780 m asl, forest with beech, oaks, birch, pine, sample with litter and soil. Leg. J. BOUDINOT and W. M. WEINER. 1 ♀ (5156).

7. 10. 1994. as holotype, Leg. J. BAUDINOT and J. NAJT. 1 ♂ (5162)

O t h e r m a t e r i a l: as holotype: 1 ♀; 24. 09. 1993. Bellechassagne, sample with moss. Leg. J. BOUDINOT and W. M. WEINER: 2 mj.

D e r i v a t i o n o m i n i s: *gigas* – very large.

D i s c u s s i o n. The new species is easy to distinguish of the other species from *Acerentulus* by some very peculiar characters. With the foretarsus 122-137 µm long it is the largest

species in the genus. Only *A. gisini* CONDÉ, 1952, *A. silvanus* SZEPTYCKI, 1991, *A. nemoralis* NAJT & VIDAL, 1970, and *A. tolosanus* NOSEK, 1969 reaches about 120 µm of the foretarsus length (NOSEK 1973; RAMSAY & TUXEN 1978; SZEPTYCKI 1991).

The new species shares the presence of seta *P3a* on urotergite VI with *A. cassagnau* NOSEK, 1969, *A. catalanus* CONDÉ, 1952, and *A. tolosanus* NOSEK, 1969, and the peculiar position of foretarsal seta $\delta 4$ with *A. berruzeuganus* ALDABA, 1983, *A. confinis maderensis* TUXEN, 1982, *A. ladeiroi* DA CUNHA, 1950, and *A. seabrai* DA CUNHA, 1950 (ALDABA 1983; NOSEK 1973; TUXEN 1982).

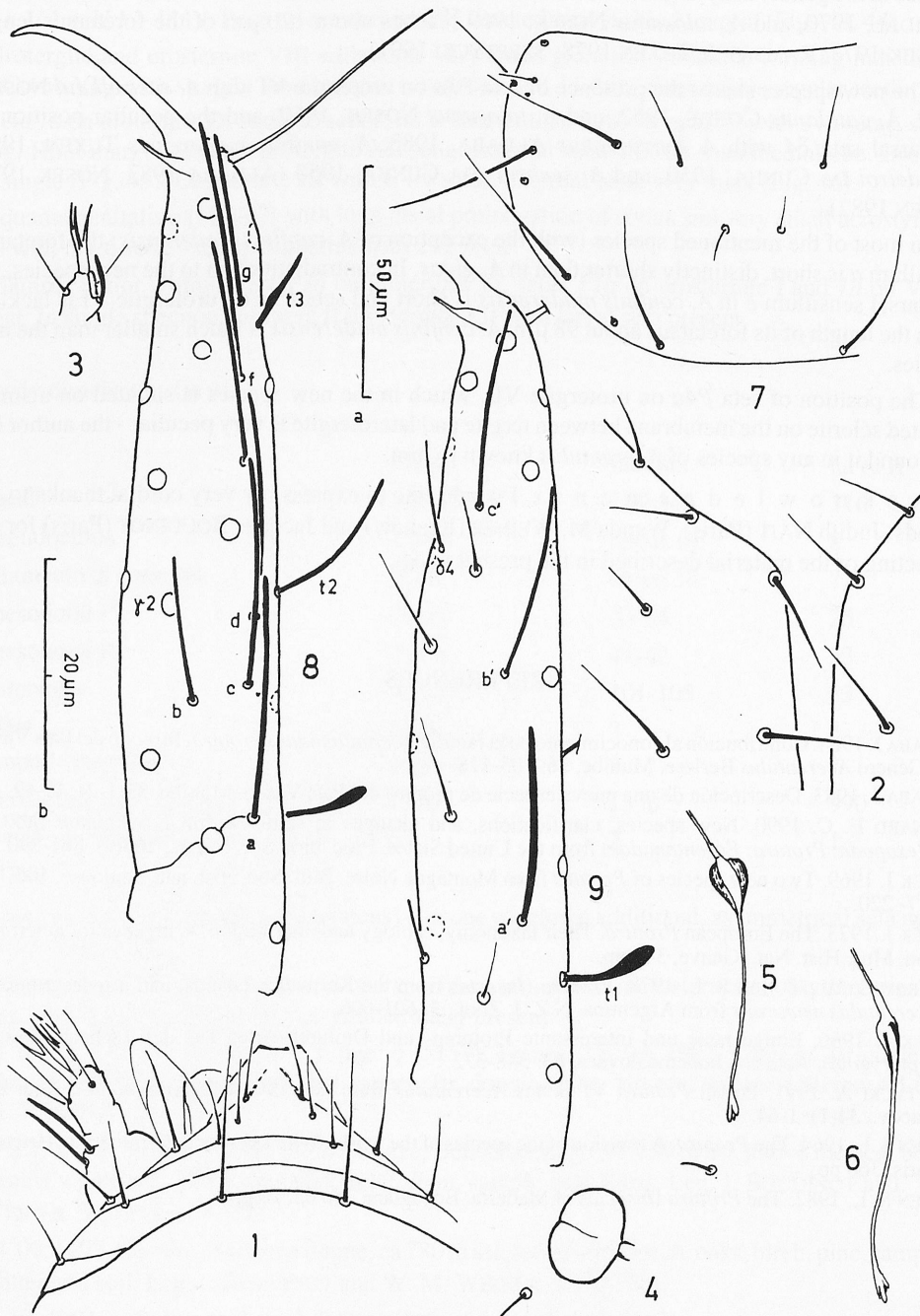
In most of the mentioned species (with the exception of *A. confinis maderensis*) the foretarsal sensillum *a* is short, distinctly shorter than in *A. gigas*. In contradistinction to the new species, the foretarsal sensillum *e* in *A. confinis maderensis* is short and seta *P3a* on urotergite VI is lacking. With the length of its foretarsus about 98 µm, *A. confinis maderensis* is much smaller than the new species.

The position of seta *P4a* on urotergite VII, which in the new species is situated on a small, isolated sclerite on the membrana between tergite and laterotergite is very peculiar - the author has not found it in any species of *Acerentulus* known to him.

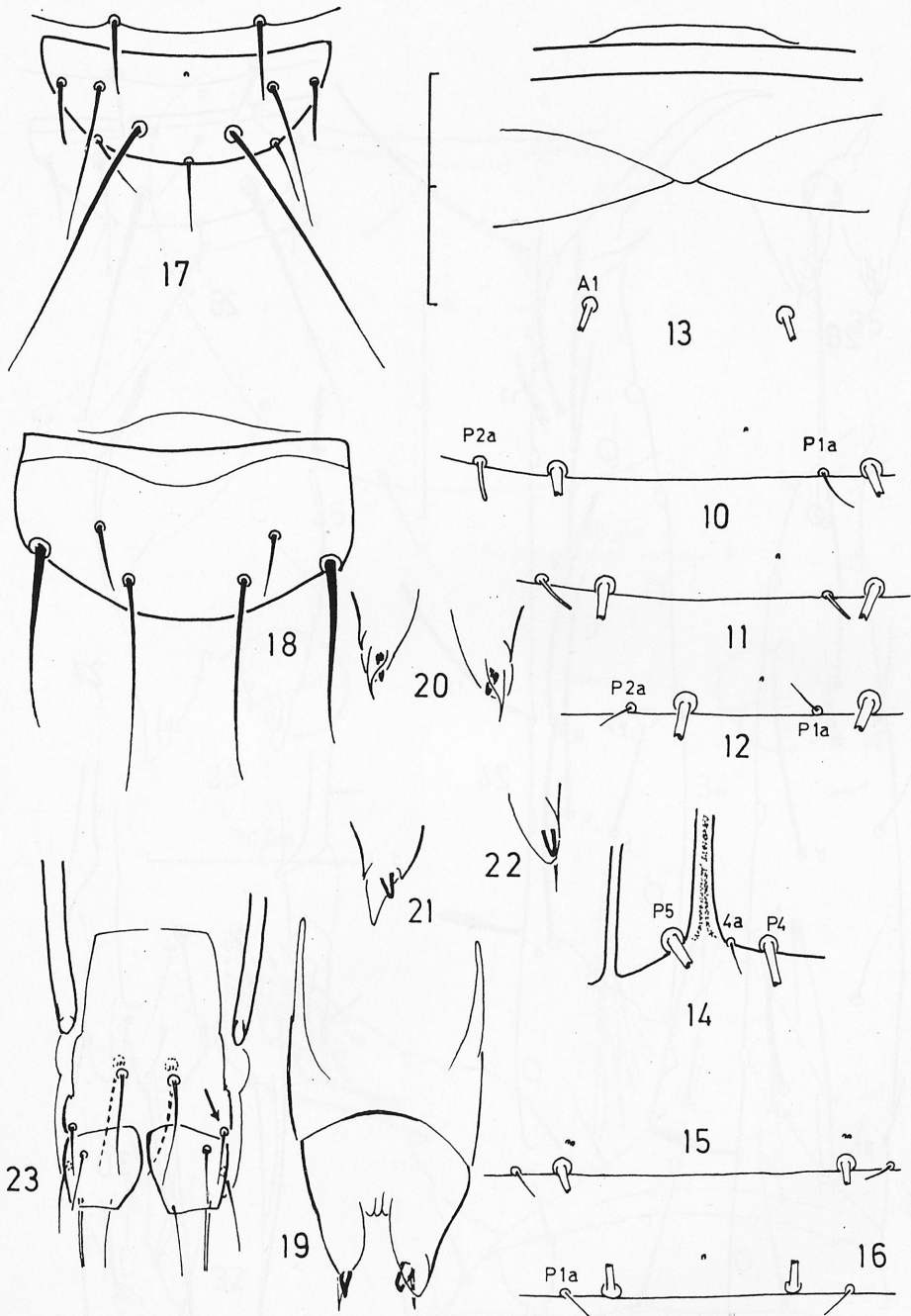
A c k n o w l e d g e m e n t s. I would like to express my very cordial thanks to my friends: Judith NAJT (Paris), Wanda M. WEINER (Kraków) and Jacques BOUDINOT (Paris) for the collecting of the material described in the present paper.

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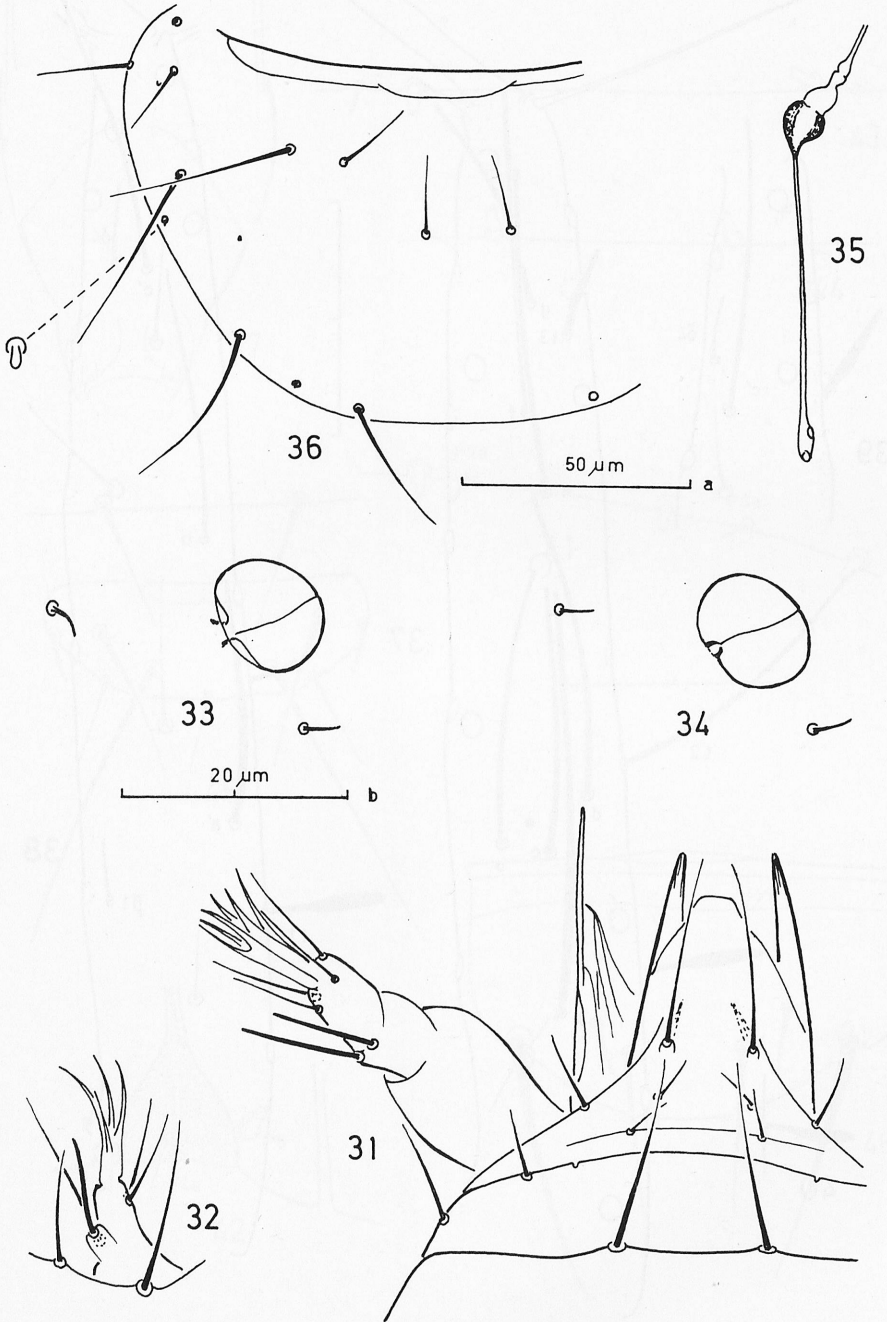
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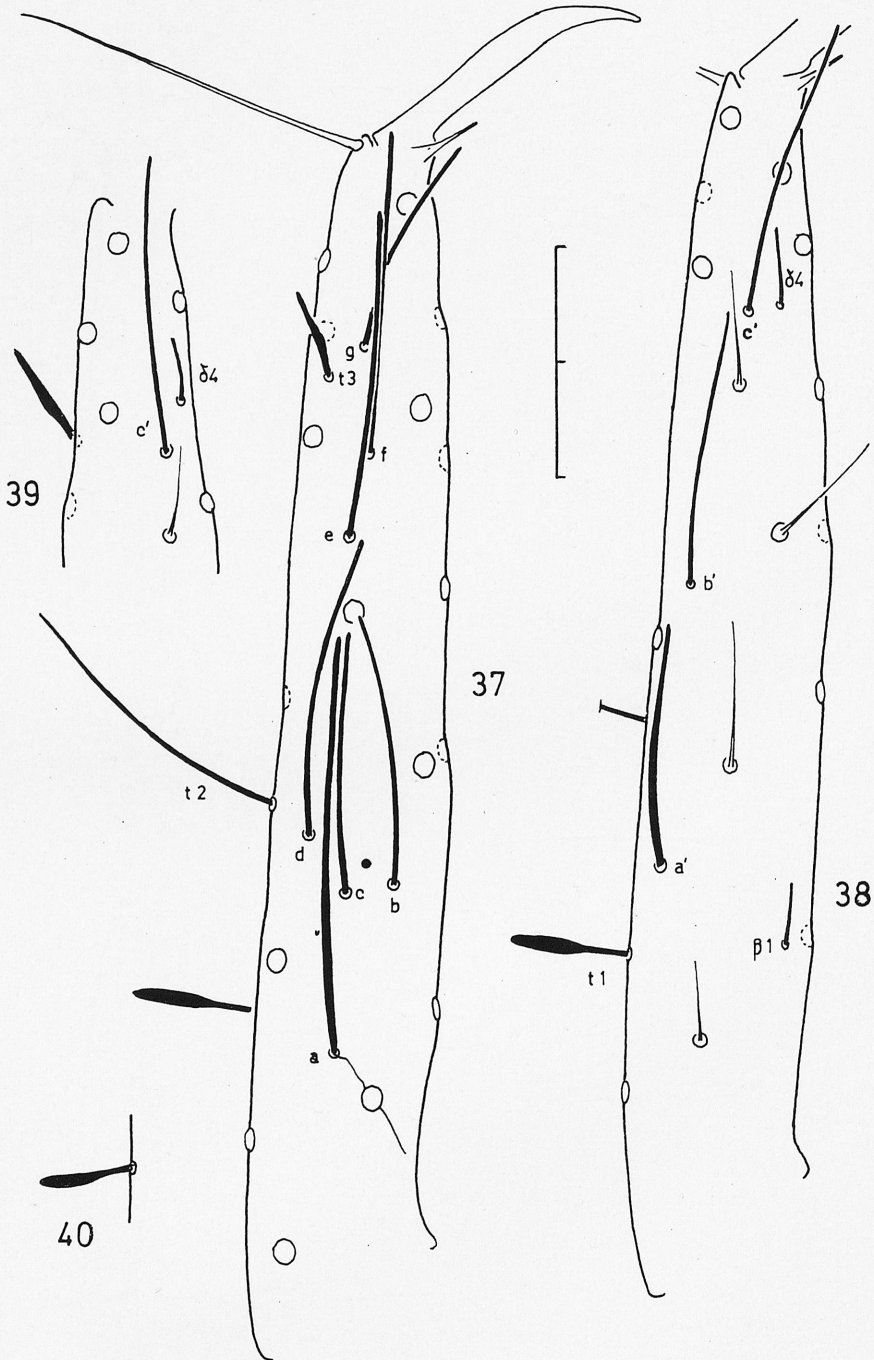
Figs 1-9. *Acerentulus correzeanus* sp. n. 1 – anterior part of the head, dorsal view (holotype); 2 – anteroventral part of head capsula (holotype); 3 – labial palp (5210); 4 – pseudoculus (5192); 5, 6 – filamento di sostegno (5200); 7 – mesonotum (holotype); 8 – foretarsus, exterior view (holotype); 9 – foretarsus, interior view (holotype). (7 – magnification a; others – magnification b).



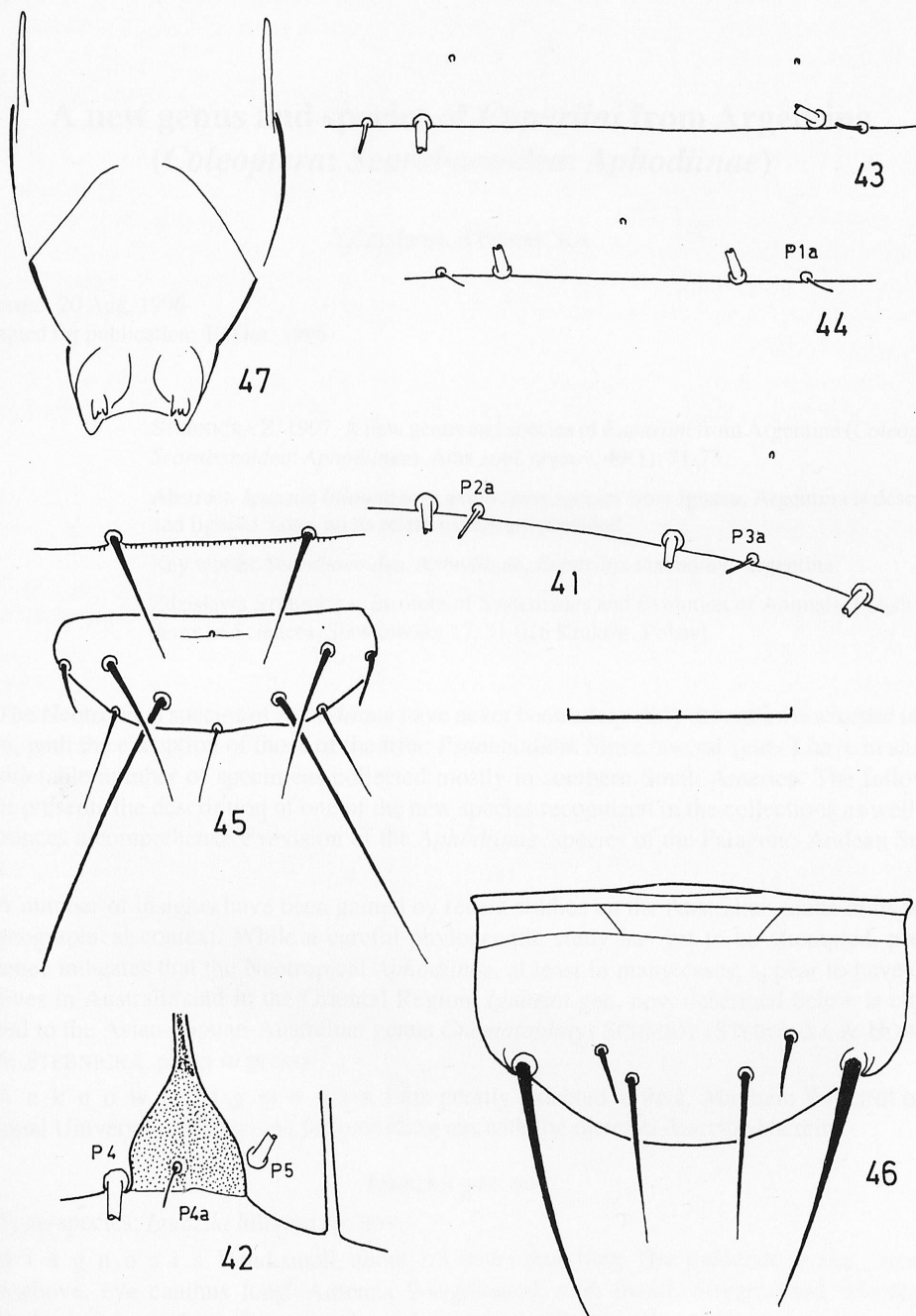
Figs 10-23. *Acerentulus correzeanus* sp. n. 10 – setae *P1a* and *P2a* on urotergite V (holotype); 11 – ditto, on urotergite VI (holotype) 12 – ditto, on urotergite VII (holotype) 13 – lineation in anteromedial part of urotergite VII (holotype); 14 – seta *P4a* on urotergite VII (5210); 15 – hind margin of urosternite VI (holotype); 16 – hind margin of urosternite VII (holotype); 17 – urotergite XII (holotype); 18 – urosternite XI (holotype); 19 – squama genitalis ♀ (holotype); 20-22 – acrostylus in different position (5191, 5192, 5193) 23 – penis, ventral view (5117) (arrow – seta on acroperiphallus). (scale: 20 µm).



Figs 31-36. *Acerentulus gigas* sp. n. 31 – anterior part of the head, dorsal view (5153); 32 – labial palp (holotype); 33, 34 – pseudoculus (5153, holotype); 35 – filamento di sostegno (holotype); 36 – mesonotum (5153). (36 – magnification a; others – magnification b).



Figs 37-40. *Acerentulus gigas* sp. n. 37 – foretarsus, exterior view (holotype); 38 – foretarsus, interior view (holotype); 39 – seta $\delta 4$ on second foretarsus of the same species (holotype); 40 – foretarsal sensillum $t1$ of the other specimen (5154). (scale: 20 μm).



Figs 41-47. *Acerentulus gigas* sp. n. 41 – seta P2a and P3a on urotergite VI (holotype); 42 – seta P4a on urotergite VII (holotype); 43 – hind margin of urosternite VI (holotype); 44 – hind margin of urosternite VII (holotype); 45 – urotergite XII (5153); 46 – urosternite XI (5153); 47 – squama genitalis ♀ (5153). (scale: 20 µm).

